# TECHNICAL BULLETIN



# AIR Pump Clutch – Intermittent Operation – Service Action S458

MODEL 1993-94 MY 4.0L Sedan & XIS

**DATE 5/97** 

17**-**9 Amended 8/97

Remove and destroy Bulletin 17-9, dated 5/97. Replace with this Bulletin. Revisions are marked with a bar and in **bold text**.

### ISSUE:

Some 1993-94 MY Sedan (4.0L) Range and XJS (4.0L) Range vehicles may experience intermittent operation of the AIR pump. The operation of the AIR pump clutch is controlled by a relay located in the engine compartment. The contacts of this relay may become contaminated by the entry of water or cleaning solutions containing silicones.

Jaguar Cars will contact all customers with 1993-94 MY Jaguar vehicles within the above VIN ranges to advise them to make dealer service appointments to verify proper operation of the relay.

#### **ACTION:**

The 1993-94 MY Sedan (4.0L) Range and XJS (4.0L) Range vehicles must be checked as described below.

For vehicles registered in states **other than California**, verify the operation of the AIR pump clutch as described below.

For vehicles serviced and/or registered **in California**, replace the AIR pump clutch relay with a sealed unit and verify the operation of the AIR pump clutch as described on the following page.

#### VEHICLES REGISTERED AND SERVICED OUTSIDE CALIFORNIA

- Open hood and observe the AIR pump clutch while an assistant starts the engine. The clutch should engage as cranking begins.
   On a hot engine, the clutch should disengage after a few seconds.
   On a cold engine, more time will elapse until the clutch disengages at a coolant temperature of 34°C (95°F). Do not wait until the clutch disengages.
- 2. If proper operation is observed, no further action is required. Stop the engine and close the hood.
- 3. If the AIR pump clutch does not engage, follow normal diagnostic procedures (refer to AJ6 4.0L Engine Management System/OBD I Diagnostic Guide) and repair. Submit a claim under normal warranty procedures.

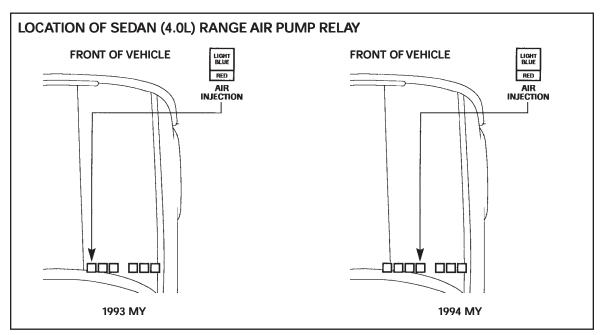
If diagnosis shows that the AIR pump relay (red mounting base on Sedan; green mounting base on XJS) is defective, install a sealed relay part no. LHF



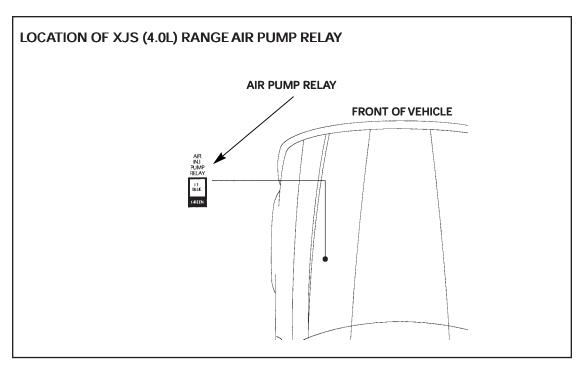
6703AA under the terms of this service action.

### VEHICLES SERVICED OR REGISTERED IN CALIFORNIA

- 1. Open hood and replace the AIR pump relay (red mounting base on Sedan; green mounting base on XJS) with a sealed relay part no. LHF 6703AA.
- Observe the AIR pump clutch while an assistant starts the engine. The clutch should engage as cranking begins.
   On a hot engine, the clutch should disengage after a few seconds.
   On a cold engine, more time will elapse until the clutch disengages at a coolant temperature of 34°C (95°F). Do not wait until the clutch disengages.
- 2. If proper operation is observed, no further action is required. Stop the engine and close the hood.
- If the AIR pump clutch does not engage, follow normal diagnostic procedures (refer to AJ6 4.0L Engine Management System/OBD I Diagnostic Guide) and repair. Submit a claim under normal warranty procedures.



**ILLUSTRATION 1** 



### **ILLUSTRATION 2**

# PARTS INFORMATION:

DESCRIPTIONPART NUMBERQTYSealed relayLHF 6703AA1

# **WARRANTY INFORMATION:**

Service Action S458

VEHICLE	SUMMARY CODE	<u>DESCRIPTION</u>	TIME ALLOWANCE
CALIFORNIA	CT	Double of AID numer releva	0.10 hvo
4.0L 1993-94 MY Sedan	ST	Replace AIR pump relay -without drive-in/out time	0.10 hrs.
MODEL CODE		(performed with another repair)	
4064, 4082 4.0L 1993-94 MY			
XJS MODEL CODE			
2000, 2030, 3000,			
3030, 4234, 4235			



VEHICLE	SUMMARY CODE	DESCRIPTION	TIME ALLOWANCE
4.0L 1993-94 MY Sedan MODEL CODE 4064, 4082 4.0L 1993-94 MY XJS MODEL CODE 2000, 2030, 3000, 3030, 4234, 4235 EXC. CALIFORNIA	SU	Replace AIR pump relay -with drive-in/out time	0.25 hrs.
4.0L 1993-94 MY Sedan MODEL CODE 4064, 4082 4.0L 1993-94 MY XJS MODEL CODE 2000, 2030, 3000, 3030, 4234, 4235	SW	Check operation of AIR pump relay no fault found -without drive-in/out time (performed with another repair)	0.10 hrs.
4.0L 1993-94 MY Sedan MODEL CODE 4064, 4082 4.0L 1993-94 MY XJS MODEL CODE 2000, 2030, 3000, 3030, 4234, 4235	SX	Check operation of AIR pump relay no fault found -with drive-in/out time	0.25 hrs.
4.0L 1993-94 MY Sedan MODEL CODE 4064, 4082 4.0L 1993-94 MY XJS MODEL CODE 2000, 2030, 3000, 3030, 4234, 4235	SY	Check operation of AIR pump relay fault determined, replace relay -without drive-in/out time (performed with another repair)	0.20 hrs.



VEHICLE	SUMMARY CODE	DESCRIPTION	TIME ALLOWANCE
4.0L 1993-94 MY Sedan MODEL CODE 4064, 4082 4.0L 1993-94 MY XJS MODEL CODE 2000, 2030, 3000, 3030, 4234, 4235	SZ	Check operation of AIR pump relay fault determined, replace relay -with drive-in/out time	0.35 hrs.

**NOTE:** California dealerships must claim either summary code 'ST' or 'SU' regardless of vehicle's state of registration. Non-California dealerships must claim either summary code 'ST' or 'SU' on vehicles registered in the state of California.

## **CLAIM SUBMISSION PROCEDURE:**

Warranty summary codes have been assigned to this service action in order to simplify claim submission. The dealership will be reimbursed the parts and labor time allowance as indicated.

#### DCS DEALERS

Submit claims using the appropriate summary code for the vehicle model and work performed. Follow standard campaign submission procedures.

#### **NON-DCS DEALERS**

Submit claims on the Recall Campaign Summary form W-25. Enter the appropriate summary code for the vehicle model and work performed in the Repair Code column. Do not use the W-1 warranty claim form.

